

1 **The Future of Work Study in the South African Context**

2
3 *To survive in the current competitive global environment, it is important for*
4 *organisations to continually look at ways to improve efficiency and*
5 *productivity. The field of work study seeks to improve the productivity and*
6 *efficiency of humans, machines and materials. While work study is an important*
7 *function in organisations, its future in South Africa is uncertain. The purpose of*
8 *this study was to explore the future of work study by looking at the barriers and*
9 *contributors of work study in the South African context. The study was*
10 *exploratory in nature with a qualitative research method. Purposive sampling*
11 *was used to include work study practitioners who were members of the*
12 *Southern Africa Institute of Management Services (SAIMAS). Data were*
13 *gathered from twelve volunteering participants through semi-structured email*
14 *interviews. The interview transcripts were transferred to Excel sheets to*
15 *facilitate analysis. Thematic analysis was applied to identify the different*
16 *themes covering the barriers and contributors of work study. For work study to*
17 *have a managerial impact, there should be a smooth flow of processes with*
18 *minimum interruptions; the findings of this study could help achieve that. The*
19 *study offered new knowledge about the barriers and contributors of work study.*

20
21 **Keywords:** *Barriers, Contributors, Future, South Africa, Work study*

22 23 24 **Introduction**

25
26 Organisations in South Africa are affected annually by labour unrest, with
27 employees constantly demanding increased remuneration (Labour Research
28 Service, 2022). Sookdeo (2016) states that “strike season” seems to have become a
29 norm in the South African calendar year but if there is an increase in remuneration,
30 it must be combined with a simultaneous increase in productivity to allow for a
31 win-win situation between the employer and employee.

32 To survive in the current competitive global environment, it is important for
33 South African organisations to continually look at ways to grow efficiency and
34 productivity. One of the most powerful tools to eliminate unwanted processes and
35 increase productivity is work study (Gujar & Moroliya, 2018). Productivity
36 improvement through work study techniques is necessary to increase profit and
37 properly utilise labour in an industry (Bagri & Raushan, 2014). The field of work
38 study seeks to improve the productivity and efficiency of humans, machines and
39 materials. While there is concern about the future of work study in South Africa
40 there is a lack of research on the topic. This called for exploration of the issue.

41 The future of work study in the South African context was compromised
42 when it stopped being a distinct field and was incorporated into other units such as
43 Human Resource Management and Organisational Development. So while work
44 study is a key function in increasing the productivity in organisations, its future in
45 South Africa is uncertain. At the same time there is limited research on the future
46 of work study as well as the barriers and contributors of work study in South
47 Africa.

1 The purpose of this study was to explore the future of work study by looking
2 at the barriers and contributors of work study in the South African context.

3 4 5 **Theoretical Framework**

6
7 The theoretical framework for this study was the contingency theory. This
8 theory suggests that for firms to be effective, certain functions must fit with the
9 organisation or external environment aspects to achieve organisational goals.
10 According to Harney (2016), there is an external and internal fit of an
11 organisational function. External fit means work study practices must fit with the
12 organisational strategy and conditions in the environment. Internal fit means work
13 study practices must work together to deliver the same message and the desired
14 outcome. Delery and Doty (1996) state that by using contingency theory,
15 organisations can promote employee behaviours that align with business strategy,
16 because behaviour is the outcome of an employee's ability and motivation.
17 Therefore, the implementing of work study practices can impact employee
18 behaviour and productivity.

19 20 21 **Literature Review**

22
23 Work study may be defined as the analysis of a job for the purpose of finding
24 the preferred method of doing it and also determining the standard time to perform
25 it by the preferred (or given) method (Gujar & Shahare, 2018). Work study helps
26 to improve job performance, optimise usage of plant and machinery and
27 standardise work methods (Gujar & Moroliya, 2018). Work study techniques raise
28 production efficiency and can be used as a scientific approach (Chisosa &
29 Chipambwa, 2018). Thong, Zuraidah and Bhuvnesh (2014) accentuate the need
30 to understand the benefits of work study in order to define organisational strategies
31 and set strategic moves. Work study employs both method study and work
32 measurement to comprehend the overall human work potential in terms of time
33 spent on completing a task (Gujar & Moroliya, 2018). Moyo, Mangore and
34 Chigara (2014) state that in cases where companies are characterised by cost and
35 time overruns, work study allows for improvements.

36 Work study consists of method study, motion study, work measurement and
37 time study (Chisosa & Chipambwa, 2018):

- 38
39 • Method study is a scientific process for enhancing job design as it
40 analyses the existing procedures and proposes job processes for improved
41 efficiency (Gujar & Moroliya, 2018). Through method study, existing and
42 suggested methods of carrying out operations are logically recorded and
43 critically analysed to develop effective methods and reduce costs. Greater
44 efficiency is achieved through enhanced layout and workplace design;
45 more efficient work procedures; effective utilisation of human resources,

- 1 machinery and materials; and generally improved design or specification
2 of the final product (Chisosa & Chipambwa, 2018).
- 3 • Motion study determines the best way to complete a repetitive job.
4 Motion study improves production methods, as it measures the distance
5 one has to move to do a job and how much one gets done within a certain
6 period of time (Chisosa & Chipambwa, 2018).
 - 7 • Work measurement is the application of techniques to determine the
8 amount of time taken to do effective physical and mental work, producing
9 units in specific tasks (Patel, Patel, Patel & Patel, 2015).
 - 10 • Time study seeks to measure how long the average worker takes to finish
11 a task at a normal pace (Chisosa & Chipambwa, 2018). Using an
12 experienced or trained person, the time study procedure involves timing a
13 sample of the worker's performance and using it to set a standard for the
14 particular task (Heizer & Render, 2000).

15
16 Work study yields copious information about existing methods and this
17 information helps to identify shortcomings in and determine possible
18 improvement to existing methods. This is called better method and increases
19 productivity, reduces worker fatigue, minimises losses and improves quality
20 (Gujar & Shahare, 2018).

21 Sookdeo (2005) found that during the implementation of productivity
22 improvement techniques by work study, the greatest resistance was experienced
23 from groups. At all times, the work study officer must try to win and maintain the
24 trust and cooperation of any group which is being investigated (Sookdeo, 2016).
25 Work study officers can only keep the goodwill and respect of supervisors if they
26 do not create the impression that they want to take over their positions (Sookdeo,
27 2005). Decision-making is an important part of work study (Archibald Huang,
28 Chacon & Gaiger, 2018). In many organisations the head of the work study
29 department is a member of top management and it is the duty of this head to keep
30 top management informed of the possible uses of work study (Sookdeo, 2016).
31 The work study officer must be able to rely on the support of top management to
32 do his/her work successfully and management must constantly communicate the
33 importance of the work study officer to the supervisors, foremen and workers
34 (Kanawaty, 1995:26). Management needs work study because of its ongoing
35 observation and analysis of the workplace to obtain the applicable facts. This
36 means that management requires someone who is able to carry out investigations
37 on a full-time basis without the interruptions of normal working duties (Sookdeo,
38 2016) – in other words, a work study officer. There is a paucity of previous studies
39 on the barriers to the future of work study.

40 Work study officers are trained to handle workers who do not cooperate and
41 they know how to overcome resistance. Prior to the start of work measurement,
42 the work study officer must gain the confidence and cooperation of the workers
43 and supervisors if he/she is to succeed. If the work study officer experiences too
44 much resistance from the staff, management may be compelled to put a stop to the
45 whole work measurement project (Sookdeo, 2016). Archibald et al. (2018) state
46 that teamwork, critical thinking, communication, professionalism and

1 collaboration are essential work study competencies. Sookdeo (2016) found that
 2 work study practitioners should meet the business's needs and add value to an
 3 organisation.

6 **Research Methodology**

8 The study was exploratory in nature due to the lack of prior studies on the
 9 future of work study. A qualitative research method was used as previous
 10 questionnaires were not available and this study had an open-ended approach. This
 11 research adopted a constructive interpretive approach, which comprised the
 12 specific field experiences, perceptions, views and evidence as well as the multiple
 13 realities of experts in work study. Purposive sampling was used to select work
 14 study practitioners/specialists who were members of the Southern Africa Institute
 15 of Management Services (SAIMAS). Twelve members of SAIMAS volunteered
 16 to take part in this study.

17 The biographical information of the participants is presented in Table 1.

18 **Table 1. Biographical Information of the Participants**

Participant	Age	Gender	Highest qualification	Present job title	Placement in the organisational structure
1	67	Male	Master of Business Administration	Private consultant	Self-employed
2	47	Male	Master of Business Leadership	Chief Executive Officer (CEO)	Office of the CEO
3	30	Male	BTech	Senior Manager Advisor	Organisational Development and Change Management Unit
4	63	Male	National Diploma	Deputy Head: Management Services	Organisational Development and Change Management Unit
5	59	Male	PhD	Senior lecturer	Department of Operations Management
6	61	Male	Masters Commercii	Private consultant	Self-employed
7	64	Female	Master's Degree	Deputy Director: Organisational Development	Chief Directorate: Human Resource Management and Development
8	64	Male	Master of Business Administration	Private principal consultant	Private consulting firm
9	43	Male	National Diploma	Chief Work Study Officer	Organisational Development Unit
10	56	Male	Certificate in Management Services	System Integrator	Directorate Technical Support Services

11	59	Female	BTech	Director: Interventions & Special Programmes Management	Group Human Capital Management Department: Organisational Efficiency Improvement Division
12	24	Female	BTech	Assistant	Institutional Effectiveness and Technology

1 Source: Authors' own compilation

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It is clear from Table 1 that most of the participants were male. All participants had a post-school qualification. Their occupations varied from being part of management to being private consultants, system integrators, academics or assistants. They were employed in divisions such as organisational development, change management, human resource management, operations management, technical support services and institutional effectiveness and technology. Not one of them was employed in a work study unit per se.

Semi-structured email interviews were used to gather data from twelve volunteering participants. The open-ended interview questions were formulated as follows:

- Share the barriers you experience in your role as a work study practitioner.
- In your opinion, what are the contributors to being successful as a work study practitioner?
- How do you see the future of work study in South Africa?

The interview transcripts were transferred to Excel sheets to facilitate analysis. Thematic analysis was used to analyse the data. Manual colour coding, as well as deductive and inductive coding, was used. The saturation of data, which means enough data had been collected to draw the necessary conclusions and any further data collection would not produce new value-added insights, was taken into consideration. Tesch's (1990) method of qualitative thematic data analysis was applied to analyse the data collected by way of the open-ended questions about the future of work study. The data were organised into Excel spreadsheets such as to facilitate analysis, and colour coding served to categorise the themes. Deductive coding derived from relevant theory was used. During data analysis other themes and categories emerged from the data and inductive coding was therefore also applied. Due to the fact that there was a lack of previous studies on this topic, inductive coding was mostly used.

In a qualitative study, reliability and validity are not required but according to Bless, Higson-Smith and Sithole (2020), trustworthiness must be ensured. Trustworthiness involves the following elements: credibility, dependability, confirmability and transferability. Credibility was established through peer debriefing and member checks (Lincoln & Guba, 1985). The study used a transparent coding process together with a systematic, comprehensive and exhaustive audit trail of the analysis of data to ensure that the research process followed was logical, traceable and clearly documented in the interests of

1 dependability (Sinkovics & Alfoldi, 2012). Zhang and Wildemuth (2009) state
2 that confirmability is determined by checking the internal consistency of the
3 research product. In the present research, this was done by checking the data, the
4 findings, the interpretations and the recommendations. Transferability was
5 obtained by having data sets and descriptions that were so rich that other
6 researchers would be able to make judgements about the findings and
7 transferability in different settings or contexts, as suggested by Elo, Kaarianinen,
8 Kanste, Polkki, Utriainen and Kyngas (2014).

9 10 11 **Findings and Discussion**

12
13 In this section, the themes are discussed by referring to the direct quotes of
14 the participants. Discussions and previous studies, although limited, are added in
15 this section.

16 17 *Barriers of Work Study*

18 19 Theme 1: Lack of understanding of the role of work study

20 Various participants mentioned that clients did not understand what the role
21 of work study practitioners was.

22
23 “... work study is used and not everybody understand it.” (Participant 3)

24
25 Sookdeo (2005) found that that during the implementation of productivity
26 improvement techniques by work study, the greatest resistance was experienced
27 from groups.

28 Participant 12 mentioned that there was a lack of understanding of what work
29 study could offer.

30
31 “Lack of understanding/familiarity with work study and what it can offer.” (Participant
32 12)

33
34 At all times, the work study officer must try to win and maintain the trust and
35 cooperation of any group which is being investigated (Sookdeo, 2016).

36 37 Theme 2: Manipulation of work study

38 The management of work study can sometimes be manipulated to suit
39 personal agendas and gain. It is therefore essential to agree upon the impartiality of
40 the work study practitioner to ensure the integrity of the outcome of the work
41 study process.

42
43 “Before start of the investigation to be told what the outcome should be (especially in
44 terms of organisational structure).” (Participant 11)

1 Sometimes work study practitioners were only used for job evaluations
2 within the human resource management department and not fully utilised for what
3 they were trained to do.

4
5 “Work Study are merely viewed as an extension of HR responsible for ensuring that
6 jobs are evaluated on demand. What we observe from the outside is that work study
7 practitioners are mainly used/misused to conduct job evaluations to inflate the post
8 levels. This unfortunate situation normally results into top-heavy structures and
9 overpaid.” (Participant 8)

10
11 Management sometimes ignored the work study report or tried to manipulate
12 it because it did not suit its objectives.

13
14 “As a practitioner, somehow it is very simple to survive. In cases where the senior
15 manager does not buy on your ideas, they tend to manipulate you if they can see that
16 you are not giving them what they want or what you are doing does not favour them.
17 In some instances, your submission might be put aside and gather dust been not
18 signed by the executives.” (Participant 9)

19
20 Work study officers should gain the respect of the management so that their
21 position is not wrongfully used (Sookdeo, 2005).

22
23 Theme 3: Lack of decision-making power

24 The work study practitioners sometimes experience that they do not have the
25 authority to execute the findings in the report and so just do what the managers tell
26 them to do.

27
28 “You do what the boss request, irrespective of the rationality of such instructions or
29 direction given.” (Participant 6)

30
31 Work study practitioners also sometimes do not have a say in making
32 decisions.

33
34 “Not afforded adequate voice in decision making.” (Participant 3)

35
36 However, Archibald et al. (2018) found that decision-making was an
37 important part of a work-study practitioner’s job.

38
39 Theme 4: Lack of management support

40 In many organisations, the head of the work study department is a member of
41 top management and it is the duty of this head to keep top management informed
42 of the possible uses of work study (Sookdeo, 2016). Managers do not always give
43 their support to work study practitioners because of fear that their shortcomings
44 and weaknesses may be exposed.

45
46 “Managers afraid that work study exposes their shortcomings.” (Participant 5)

47

1 This may lead to a lack of management support to implement the work study
2 report.

3
4 “The lack of support from management within an organisation if the terminologies of
5 work study is used.” (Participant 2)

6
7 The work study officer must be able to rely on the support of top
8 management to do his/her work successfully and the importance of the work study
9 officer to the organisation should be communicated to the supervisors, foremen
10 and workers by management (Kanawaty, 1995:26).

11
12 *The following contributors of work study were identified.*

13
14 Theme 5: Excellent competencies

15 In order for a work study practitioner to properly do his/her work, the
16 necessary competencies should be acquired.

17
18 “Being independent, fearless, effective time management and continuous research
19 and development for informed recommendations and mastering the ever-changing
20 business needs.” (Participant 3)

21
22 Work study practitioners should also have interpersonal skills to work with
23 people. If the work study officer experiences too much resistance from the staff,
24 management may be compelled to put a stop to the whole work measurement
25 project (Sookdeo, 2016).

26
27 “Having a personality to work with people.” (Participant 5)

28
29 Archibald et al. (2018) found that teamwork in work study was essential; this
30 was confirmed by the findings of the current study.

31
32 “Show you are considerate. Have a positive attitude. Be honest. Be a team player.”
33 (Participant 10)

34 “Ethical behaviour and professionalism are the cornerstone and foundation.”
35 (Participant 5)

36
37 Archibald et al. (2018) also found that professionalism was critical for work
38 study practitioners.

39
40 Theme 6: Meeting business needs

41 Work study practitioners should meet the business’s needs to ensure
42 efficiency, effectiveness and productivity.

43
44 “You must understand the business you are working in and you should know
45 the functional side like the back of your hand and understand all rules and
46 regulations relating to your own field.” (Participant 7)

47

1 Future studies should be conducted to ensure that work study meets the ever-
2 changing needs of a business.

3
4 “... continuous research and development for informed recommendations and
5 mastering the ever-changing business needs.” (Participant 3)

6
7 Work study practitioners should proactively embark on their own projects to
8 improve service delivery in an organisation.

9
10 “WS should take initiative and embark on their own initiated projects to improve
11 service delivery. The more they proactively demonstrate the role they could play
12 linked to the value they add, the more they will be used for the right reasons.”
13 (Participant 8)

14
15 Sookdeo (2016) also found that work study practitioners should meet the
16 business’s needs.

17
18 Theme 7: Adding value to the organisation

19 It is critical that organisations add value from the inside and not outsource all
20 projects.

21
22 “.....that there is more than a need/requirement for WS services in South Africa.
23 The WSS practitioners in government have to wake up, take the challenge and do
24 something about the prevailing situation. The answer is not to outsource all the
25 projects to private sector, but to start adding value from the inside.” (Participant 8)

26
27 Participant 11 mentioned that work study should add value by staying
28 relevant and focusing on meeting customer needs.

29
30 “It is each OD / Management services unit within an organisation’s responsibility to
31 ensure appointment of skilled practitioners (links to training), to actively market their
32 service, to show with their work what value can be added within an organisation, to
33 ensure they stay relevant and efficient, to focus on needs of your customers.”
34 (Participant 11)

35
36 Sookdeo (2016) agrees that work study must add value to an organisation.

37
38 *Practical and managerial implications*

39
40 On a practical level, it is essential that think tanks be initiated by relevant
41 stakeholders, such as industry, government and universities, to deliberate the
42 implications of the future of work study in South Africa. Conceiving the potential
43 value-add of work study should have a positive outcome in terms of future
44 organisational performance. A practical implication of the future of work study is
45 the fact that the areas for productivity improvement in organisations need to be
46 identified. In a globalised economy, competitiveness means the ability to take the
47 most advantageous position in a constantly changing market environment and
48 work study is a practical way to achieve this.

1 This study can help management and work study practitioners to focus on the
2 essence and value of work study and thus enhance management effectiveness. An
3 awareness of the barriers and contributors can facilitate a smooth production flow
4 with minimum interruptions as well as the optimal use of work study. The lack of
5 management support, limited understanding of the role of work study,
6 manipulation of work study and absence of decision-making power might
7 negatively impact work study. On the other hand, competent work study
8 practitioners who meet business needs and add value to the organisation might
9 have a positive effect on organisations. South African organisations should
10 therefore re-imagine the future of work study to remain competitive in a fast-
11 changing world.

12
13 *Limitations*

14
15 A limitation of this study was that it could not be generalised to other
16 countries, as a single qualitative study was conducted. Another limitation was that
17 only members of one professional body participated and the views of additional
18 work study practitioners in South Africa were not obtained. Lastly, the paucity of
19 literature on the future of work study limited both the exploration of relevant
20 literature and the possibilities of comparing the findings of this study with those of
21 other studies.

22
23 *Recommendations*

24
25 It is recommended that management and work study practitioners be made
26 aware of the barriers and contributors found in this current study to ensure that
27 work study in South Africa not only survives but thrives. Management and
28 employees must understand the role of work study and the manipulation of this
29 field should not be tolerated. Work study practitioners should obtain decision-
30 making power to ensure the implementation of their reports. It is also
31 recommended that management support work study because it will help boost
32 production and productivity. Work study practitioners should ensure that they are
33 competent in time management and team work and have interpersonal skills. They
34 should also be considerate, positive and honest. Ethical behaviour and
35 professionalism are the cornerstones of the work study profession and must be
36 evident at all times. Work study practitioners must meet the needs of the business
37 and add value.

38 For future research, it is recommended that this research be extended to other
39 countries to investigate the value that work study can add in the global context. A
40 quantitative study can also be conducted to determine the demographic differences
41 in how management, employees and work study practitioners perceive the future
42 of work study in South Africa and globally.

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1 Conclusions

2
3 In this study, new knowledge about the barriers and contributors of work
4 study were obtained. The future cannot be predicted but alternative work study
5 futures can be forecast, envisioned and then invented. Work study can assist in
6 giving South African organisations a competitive edge. Organisations should
7 rethink the future of work study to remain competitive in the global sphere.
8
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